

a step of generating key data, encrypting the key data with a password, and writing the encrypted key data to said storage medium;

a step of encrypting the data with the key data, and writing the encrypted data to said storage medium;

a step of reading the encrypted key data from said storage medium;

a step of decoding the encrypted key data with the password; and

a step of decoding the data on said storage medium with the decoded key data, wherein said key data generating step comprises:

a step of generating different key data for each of a plurality of unit storage areas of said storage medium;

a step of encrypting each said different key data for each unit storage area with said password, and

a step of writing each said encrypted key data to said storage medium,

and wherein said data encrypting step comprises a step of encrypting the data with the key data corresponding to said unit storage area to write the data,

and wherein said data decoding step comprises a step of decoding the data with the decoded key data corresponding to said unit storage area where the data have been read.

8. (Twice Amended) A storage medium data protecting apparatus for protecting data on a storage medium, comprising:

a storage medium having a plurality of unit storage areas; and

a control circuit for reading and writing the data from and to said storage medium,

wherein said control circuit has:

a write mode of encrypting, after generating key data, the key data with a password, writing the encrypted key data to said storage medium, encrypting the data with the key data, and writing the encrypted data to said storage medium;

a read mode of encoding, after reading the encrypted key data from said storage medium, the encrypted key data with the password, and decoding the data on said storage medium with the decoded key data,

wherein said write mode comprises a mode of generating different key data for each unit storage area of said storage medium, encrypting each said different key data for each unit storage area with said password, writing each said encrypted key data to said storage medium, and encrypting the data with the key data corresponding to said unit storage area to write the data,

and wherein said read mode comprises a mode of decoding the data with the decoded key data corresponding to said unit storage area where the data have been read.

15. (Twice Amended) A storage medium having protected data is stored with;

a plurality of key data encrypted with a different password for each of a plurality of unit storage areas of said storage medium; and

a plurality of data encrypted with the key data corresponding to said unit storage area of said storage medium.

18. (Once Amended) An encoding method protecting data on a storage medium, comprising:

a step of generating different key data for each unit storage area of said storage medium, encrypting the key data with a password, and writing the encrypted key data to said storage medium;

a step of encrypting the data with the key data corresponding to said unit storage area to which the data is to be written, and writing the encrypted data to said storage medium.

19. (Once Amended) A decoding of protected data on a storage medium, comprising:

a step of reading the encrypted key data which is encrypted with different key data for each unit storage area of said storage medium from said storage medium;

a step of decoding the encrypted key data with the password; and

a step of decoding the data on said storage medium with the decoded key data corresponding to said unit storage area where the data have been read.